1310.10 Assessment, Approval and Review Procedures

Issued January 6, 1997

SUBJECT: Assessment, Approval and Review Procedures.

APPLICATION: Executive Branch Departments and Sub-units.

PURPOSE: To provide the procedures concerning the categorization of system development projects as being "large scale" and the concomitant project management and quality assurance requirements intended to insure that major, costly development projects are implemented on time, within budget and meet specifications.

CONTACT AGENCY: Department of Information Technology (DIT)
Bureau of Strategic Policy

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SUMMARY: This procedure establishes the assessment, approval and review procedures for large scale information processing system development projects. It describes the following documents which agencies must submit to DIT, prior to and during the system development process: Project Assessment Worksheet (PAW), Feasibility Report (FSR), Quarterly Progress Report. It determines a "large scale" system development project as one achieving a score of 100 or greater resulting from various project characteristics being input to the PAW algorithm.

APPLICABLE FORMS: None.

PROCEDURES:

Agency:

- Must assess and submit to DIT for review documents which describe the allocation of State resources for the development and implementation of large scale, automated information support systems.
- Prepares and submits a PAW to the Bureau of Strategic Policy (BSP). This document facilitates the determination of a "large scale" project
- Must prepare and submit to BSP a Feasibility Study Report (FSR) and Quarterly Progress Reports for projects determined to be large scale. Large projects usually encompass most of the following characteristics:
  - Require a full requirements study involving at least 2-3 organizational units or at least 2-3 major administrative (business) processes.
  - Require a full requirements study due to a major change in the user's environment (change in type of service provided) or statutory requirement.
  - Require the investigation of multiple solutions or design alternatives for the problem area under study.

- Require a complete cost benefit comparison of the different solutions or design alternatives.

- Require additional funding authorization.

- Require the investigation of an application software package as a potential solution.

- Require the probable acquisition of computer hardware/software or computer-related hardware/software.

- Involve the potential building of a data base application, a new communications network, or the building of a distributed system.

- Involve a major conversion effort of existing data/records (may involve a separate conversion subsystem).

- Involve the acquisition or identification of additional space and environmental resources.

• Other general considerations are:

- Where no systems activity has been performed in the user area previously or in "recent memory."

- Where the past "service level" to the user has been judged to be "poor" or "low."

- Where there is a high risk of potential failure with the project.

- Where the project team requires the support of outside services or the turning over of the project to an outside concern at some point in the development of the project.

The Service Request and the PAW appearing on the following pages are designed to assist agency management in determining if a proposed automated system qualifies as a large scale automated information system. A total PAW score in excess of 100 places the project in the large system category. Having qualified, the requesting agency must prepare an FSR and submit Quarterly Project Reports as outlined in this letter. Other responsibilities are outlined in Administrative Manual Procedure 1310.06.

BSP:

Will review PAWs and approve or disapprove the determination of a project being a "large scale automated information support system". If an affirmative determination is made, the project must follow project management and quality assurance techniques as described in Procedure 1310.09. DIT will also receive and review required FSRs and Quarterly Progress reports. See also the ADPICS Commodity Code Approval Paths (5983) dated July 10, 1996.

SERVICE REQUEST
FOR
INFORMATION SYSTEMS SUPPORT

Department: Check One

Org'l Unit: New System __

Project Manager: System Enhancement __

SERVICE REQUEST System Maintenance __

Project Title:

DESCRIPTION OF NEED OR PROBLEM

__ See Attachments

PROPOSED SOLUTION

__ See Attachments

DESCRIPTION OF BENEFITS

Tangible:

__ See Attachments

Intangible:

__ See Attachments

AGENCY APPROVALS

REQUESTER	DIT
Name:	Name:
Sig:	Sig:
Title:	Title:
Date:	Date:

PROJECT ASSESSMENT WORKSHEET

Department/Agency:	System name:
Org'l Unit:	Date:

AREAS OF CONSIDERATION	Point Value		Weight		Valuation
A.SCOPE					
Multi-Department	8				
Single- Department	5				
Multi-Divisional	3				
Single Division	2				
Total A		X	2.0	=	
B. FUNDING CONSIDERATIONS					
Availability of Funding					
New Funding Required	8				
In Current Operating Budget	4				
(sub-total)					
Sources of Funding:					
Development Costs from General Fund:					
100%	8				
GT 75% to LT 100%	7				
GT 50% to LT 75%	5				
GT 25% to LT 50%	3				
GT None to LT 25%	2				
NONE	1				
(sub-total)					
Operational Costs from General Fund:					
100%	8				
GT 75% to LT 100%	7				
GT 50% to LT 75%	5				
GT 25% to LT 50%	3				
GT None to LT 25%	2				
NONE	1				
(sub-total)					
Total B		X	2.0	=	

AREAS OF CONSIDERATION	Point Value		Weight		Valuation
C. ANNUAL OPERATING COSTS					
Estimated Personnel Costs:					
GT $5,000K	9				
GT $2,500K to LT $5,000K	7				
GT $1,000K to LT $2,500K	5				
GT $500K to LT $1,000K	3				
LT $500K	1				
(sub-total)					
Estimated Equipment Costs:					
GT $5,000K	9				
GT $2,500K to LT $5,000K	7				
GT $1,000K to LT $2,500K	5				
GT $500K to LT $1,000K	3				
LT $500K	1				
(sub-total)					
Estimated Communications Costs:					
GT $2,500K to LT $5,000K	6				
GT $1,000K to LT $2,500K	4				
GT $500K to LT $1,000K	2				
LT $500K	1				
(sub-total)					
Total C		x	2.0	=	

AREAS OF CONSIDERAITON	Point Value	Weight	Valuation
D. DEVEOPMENTAL COSTS			
Use of State Personnel:			
LT 25%	8		
GT 25% to LT 50%	6		
GT 50% to LT 75%	3		
GT 75%	1		
(sub-total)			
Cost of Contractural Personnel			
GT $2,000K	8		
GT $1,000K to LT $2,000K	6		
GT $500K to LT $1,000K	3		
LT $500K	1		
(sub-total)			
Departmental Effort:			
GT 50 person years	8		
GT 25 person years to LT 50 person years	6		
GT 10 person years to LT 25 person years	3		
LT 10 person years	1		
(sub-total)			
Developmental Equipment Costs:			
GT $2,000K	8		
GT $1,000K to LT $2,000K	6		
GT $500K to LT $1,000K	3		
LT $500K	1		
(sub-total)			
User Training Costs			
GT $250K	5		
GT $150K to LT $250K	3		
GT $50K to LT $150K	2		
LT $50	1		
(sub-total)			
Conversion Costs			
GT $200K	4		
GT$100K to LT $200K	3		
GT $50K to LT $100K	2		
LT $500K	1		
(sub-total)			
Expected Length of Developmental Effort:			
GT 3 years	5		
GT 2 year to LT 3 years	3		
GT 1 year to LT 2 years	2		
LT 1 year	1		
(sub-total)			
Total D		X 2.0 =	

AREAS OF CONSIDERATION	Point Value		Weight		Valuation
E. OTHER CONSIDERATIONS					
Estimated Cost of Performing Current System/Function:					
GT $5,000K	7				
GT $2,000K to LT $5,000K	5				
GT $1,000K to $2,500K	3				
GT $500K to LT $1,000K	2				
Lt $500K	1				
(sub-total)					
Percent Cost Savings Upon Implementation:					
GT 25%	5				
GT 15% top LT 25%	3				
GT 5% to LT 15%	2				
LT 5%	1				
(sub-total)					
Expected Useful Life of System:					
GT 5 years	4				
GT 3 years to LT 5 years	3				
GT 1 year to LT 3 years	2				
Lt 1 year	1				
(sub-total)					
Total E		X	1.0	=	

TOTALS		
Scope	Section A	
Funding Considerations	Section B	
Annual Operating Costs	Section C	
Developmental Costs	Section D	
Other Considerations	Section E	
	Grand Total (A+B+C+D+E)	

Feasibility Study Required?	YES	NO

FEASIBILITY STUDY REPORT

Upon review of a Service Request and the associated Project Valuation Assessment Worksheet, the Bureau of Strategic Policy, (BSP), Department of Information Technology (DIT) will inform the initiating agency of the need to prepare a Feasibility Study Report (FSR). BSP approval of the FSR must be secured before the expenditure of resources for any large scale information processing system undertaking.

A feasibility study is the analysis an agency must perform to determine if information technology will effectively address the agency's needs, and if so, in what way. The time and effort needed to conduct a feasibility study will depend on the impact that information technology will have on the program that the problem affects, how much it will cost, the number of alternative solutions, and the complexity of the system solution. The agency must demonstrate that the proposed system solution is a sound investment of State resources--an investment that will pay for itself over a reasonable period of time.

A suggested 4-step approach to conducting a feasibility study is as follows:

- Determine the requirements of an effective response to the problem or opportunity.
- Identify and analyze alternative responses.
- Choose the best response.
- Prepare a management plan for implementing the response.

As each of these steps is carried out, the documentation for the FSR is assembled. A model Table of Contents for the FSR is as follows:

FEASIBILITY STUDY REPORT
TABLE OF CONTENTS

I. REQUIREMENTS SECTION

- A. Background
- B. Problem/Opportunity Statement
- C. Objectives
- D. Information Requirements

II. ALTERNATIVE ANALYSIS SECTION

- A. Baseline Analysis
- B. Alternatives Considered
- C. Economic Analysis of Alternatives

III. PROPOSED ALTERNATIVE SECTION

- A. Identification of Proposed Alternative
- B. Economic Analysis

IV. MANAGEMENT PLAN SECTION

- A. Project Responsibilities and Organization
- B. Quality Assurance
- C. Project Management Schedule
- D. Staffing Sufficiency

V. APPENDICES (as appropriate)

The content of the 5 sections of the FSR is described below. At a minimum, the FSR will address the topics that have been presented. If not, one or more facets of the study may have been overlooked.

I. REQUIREMENTS SECTION

A. Background

The Background component contains a brief summary of:

1. The relevant features of the agency program involved with the problem or opportunity (including the manner and extent to which information technology is currently applied).

2. The conditions which created--or significantly contributed to--the problem or opportunity being addressed by the FSR (i.e., workload increases, staff reductions, additional requirements mandated by law or Federal regulations, and limitations in the capacity or capability of information technology resources currently used in the agency).

B. Problem/Opportunity Statement

The Problem/Opportunity Statement provides a general discussion in program terms of the problems or opportunities which are to be addressed. Most problems/opportunities fall into 1 or more of 4 general categories:

1. Reduction of costs incurred in operating the program

2. Generation of additional program-related revenues

3. Avoidance of future costs in operating the program

4. Provision of program services at a satisfactory level in accordance with specified policy

C. Objectives

The Objectives component defines the significant results that will be achieved for an alternative to be an effective response to the problem or opportunity being addressed.

It is important that:

1. Each objective relate to a problem or opportunity specified in the Problem/Opportunity Statement

2. At least 1 objective be included for each problem or opportunity

3. Each objective (like each problem or opportunity) be stated in (a) program terms and (b) specific observable or measurable terms

4. Each objective be realistically achievable.

D. Information Requirements

The Information Requirements component provides a general description of the information technology capabilities that must exist in order to satisfy each defined objective. The functional requirements must specify the following:

1. Outputs, in terms of volume, frequency, distribution, etc.

2. Inputs, in terms of volume, source, media, etc.

3. Capabilities of the information technology, in terms of the functions and features needed to support the program process

II. ALTERNATIVE ANALYSIS SECTION

The Alternatives Analysis Section must include a summary description of any current method of operation--the Baseline Analysis--followed by descriptions of the alternatives considered in selecting the proposed alternative and an economic analysis of alternatives. The analysis should include the following steps:

A. Measure the current way of doing business in sufficient detail to provide a baseline for current costs.

B. Describe the shortcomings of the existing system to show which program objectives are not met and why, or what required functions are not served.

C. Identify and describe all realistic and sufficiently detailed alternatives.

D. Develop complete, reasonable, and comparable cost analyses for each alternative.

E. Measure the fiscal impact of each alternative against the existing system or method of operation.

F. Identify the benefits and drawbacks of each alternative in terms of the agency's programs.

G. Present valid reasons for each alternative that is rejected.

III. PROPOSED ALTERNATIVE SECTION

The Proposed Alternative Section identifies the alternative which best satisfies the previously-defined objectives and information requirements. It also provides additional information on the course of action proposed in the FSR. A standardized economic analysis of the proposed alternative and cost comparisons of satisfactory alternatives are contained within this section. This section must incorporate sufficient detail to allow decision-makers to confirm the advantages and disadvantages of the recommended alternative in terms of:

- objectives and functional requirements
- overall program costs and benefits
- resources (time, funding, people, expertise)
- potential risks associated with the alternative

The analysis should include the following steps:

1. Identify the proposed alternatives.

2. Describe how current operations will be affected if the proposed alternative is implemented.

3. Quantify any reduction in current funding levels attributable to a new information system.

4. Quantify any generation of revenues for the agency.

5 Quantify any avoidance of future costs of program operations.

6. Identify improvements to the timeliness or quality of program services.

7. Describe specific ways to measure and observe the project's benefits.

8. Describe how the benefits justify the cost of the project.

9. Describe how the benefits will be achieved.

10. Show funding sources, by fiscal year, for all project costs.

11. Describe and quantify funding deficiencies or surpluses.

12. Describe the impact of project delay or disapproval.

IV. MANAGEMENT PLAN SECTION

The Management Plan Section must summarize the following management elements:

A. Project Responsibilities and Organization--a statement of the respective authorities and responsibilities of the project manager and staff, program management and staff, and departmental management for major project tasks. Estimates of the expected number of hours/days/weeks to be contributed to the project by each category of participant must be included. The project organization must be shown and the project manager identified.

B. Quality Assurance--a statement of how quality assurance standards and techniques will be applied during the system development life cycle to assure that the final product will meet the defined objectives within the specified time frame and within the approved expenditure levels. Describe who will perform the quality assurance function and how they will relate to the project organization.

C. Project Management Schedule--a summary schedule for status reporting, against which completion of tasks during the course of the project will be monitored. The schedule should focus on the duration of critical tasks, major management decision-points, and progress reporting milestones. The milestones should reflect products and major events that can be readily identified as completed or not completed on the specified due date. Milestones should be spaced at intervals of from one month to quarterly to allow management or control agency monitoring of project progress.

D. Staffing Sufficiency--discuss the sufficiency of agency resources, such as project management and technical expertise, to implement the project successfully. Address existing resources and those the agency plans to acquire.

QUARTERLY PROJECT REPORT

Quarterly Project Reports are required for projects which have been designated as large scale in nature.

Quarterly Project Reports will be submitted by the project manager to the Bureau of Strategic Policy, Department of Information Technology (DIT), utilizing the format on the next page. The first Quarterly Project Report will be due 90 days after the DIT approval date appearing at the bottom of the approved Service Request which accompanied the earlier submission of the PAW.

Submission of the Post-Implementation Evaluation Report will serve as the final Quarterly Project Report.

Agencies are encouraged to also use the Quarterly Project Report to document project activity on projects that do not qualify as reportable to DIT. However, it is not necessary to forward copies of these reports to DIT unless specifically directed otherwise.

QUARTERLY PROJECT REPORT

DATE:

TO: Joel Storchan, Director
Office of Standards and Contract Management
Bureau of Strategic Policy
Department of Information Technology

FROM: *Project Manager*
Organizational Unit
Department

SUBJECT: QUARTERLY PROJECT REPORT FOR *(Project Title)*

PERIOD COVERED*:* *(Date)* Through *(Date)*

PROJECT STATUS

Provide a brief summary of the project status, indicating whether the project remains on time and within the approved budget. Explain any deviations from the original project plan and their impact on the project.

__ See Attachments

PROJECT MANAGEMENT SCHEDULE

Provide an updated Project Management Schedule indicating completion dates of specific tasks or deliverables. (This may be included as an attachment.)

__ See Attachments

DEVIATIONS/DEPARTURES/SPECIAL CIRCUMSTANCES

Describe any notable deviations from the costs, benefits or schedules documented in the FSR or when a major revision occurs in project requirements or methodology. Explain the causes of the deviations and the remedial activities planned or implemented.

__ See Attachments

Please contact *(name)* at *(telephone number)* if additional information regarding this Quarterly Project Report is needed.

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